UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)
[redacted]

SUBJ: EPA Asbestos Removal at 209 Watson Street

Dear (b)(6) [redacted]:

Enclosed, you will find the Removal Action Status Report for the property located at 209 Watson Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT
DAVIDSON ASBESTOS

Property Address: 209 Watson Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were collected at a depth of 0 to 3 inches below ground surface (bgs), and subsurface soil samples were collected at a depth of 3 to 6 inches bgs. Analytical results are reported in increments of 0.25 percent asbestos. Those samples with analytical results reported as "trace" (less than 0.25 percent asbestos) were further analyzed by fluidized bed analysis and reported in soil concentrations of phase contrast microcopy equivalent (PCME) structures per gram (s/g) of soil.

Property Address	Area Sampled	Surface Soil Results (percent asbestos) 0-3 inches deep	Subsurface Soil Results (percent asbestos) 3-6 inches deep
209 Watson Street	Around House	0.0 s/g	0.25
	Corner of Watson and Depot	0.0 s/g	No Asbestos Detected

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: lawn to 12 inches and under the back stairwell and tree line and residential drip line areas to 3 inches (See Appendix 1). Visual inspections of the areas excavated for asbestos-containing materials (ACM) were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present. Once ACM was no longer visibly present, restoration of the excavated areas was allowed to commence.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted at six stationary locations during removal activities from May 30 through May 31, 2017. Air sampling was conducted daily at four of those locations as weather permitted and based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.000061 fibers per cubic centimeter (f/cc) to less than 0.0024 f/cc (see Appendix 2). A 7-point composite soil sample was collected from the excavated areas before restoration began, and the analytical result indicated no asbestos detected.

Perimeter air and composite soil samples were collected by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included installation of snow fencing on top of the subsurface of the excavated area, backfill, topsoil, and sod in the excavated lawn areas, topsoil and mulch around the tree lines, and snow fencing, backfill, and rock in the driveway. All areas were restored to the original height of the surrounding grade.

Time Frame of Removal Action: Removal activities began on May 30, 2017, and were completed on May 31, 2017.

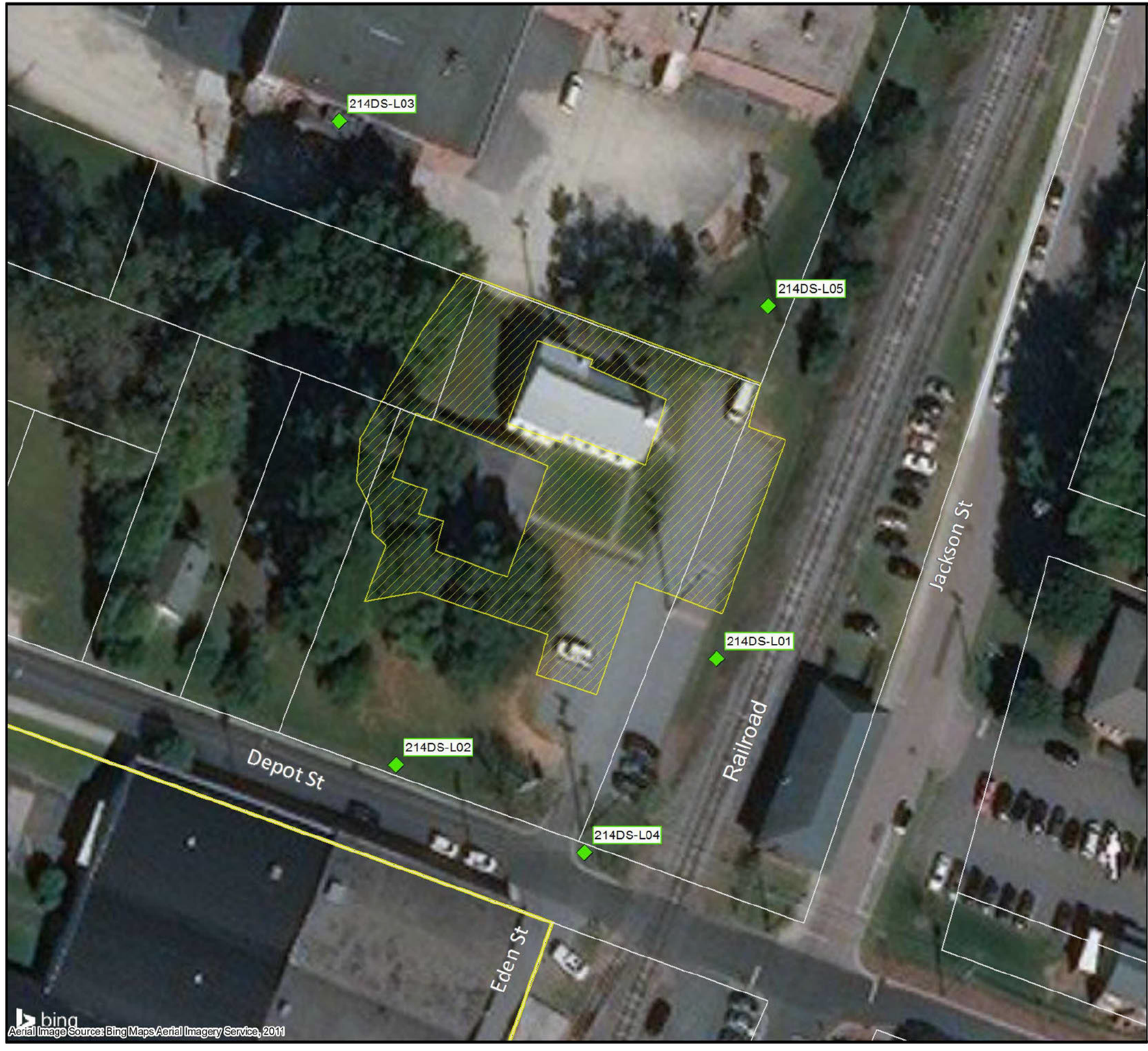
Appendices to this report include:

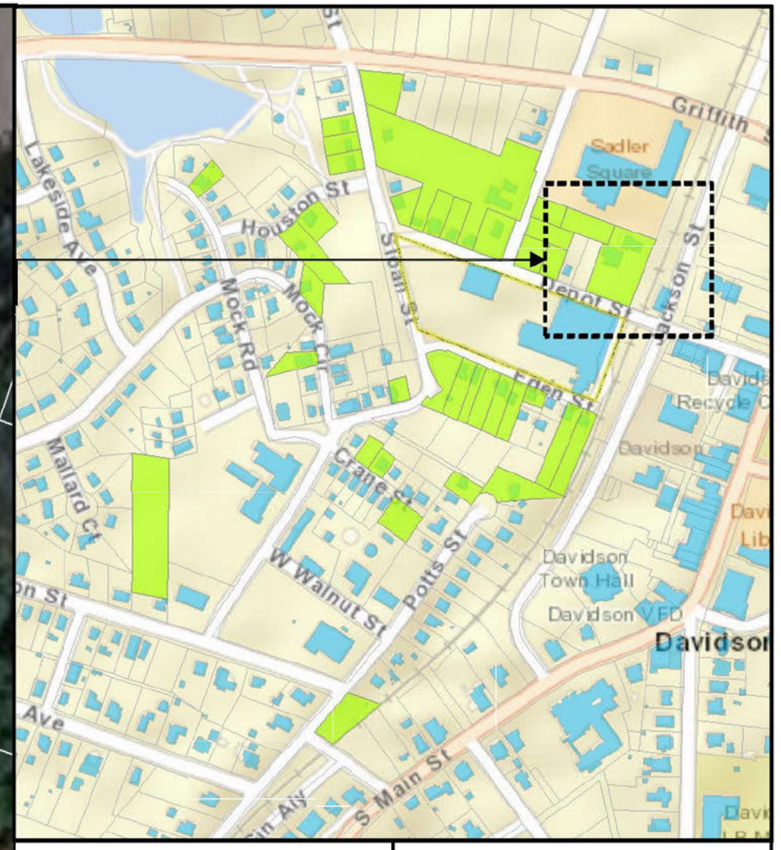
1. Figure of removal area and air sampling locations
2. Table of air sampling results
3. Photographic log of removal activities

APPENDIX 1

FIGURE

(One Page)





Legend

- Air Sample
- Removal Area
- Parcel Boundary
- Approximate Site Boundary

Inset Map

- *Parcels with Removal Activities*
- Building/Structure

214 Depot Street

N
W E
S

0 40 80
Feet

Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, http://maps.co.mecklenburg.nc.us

United States Environmental Protection Agency Region 4

FIGURE 1

Removal Areas and Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City:	**County:**	**State:**
Davidson	Mecklenburg	North Carolina

TETRA TECH

Date: 12/7/2017

Analyst: dale.vonbusch

File: C:\TT-01-071_Davidson_Asbestos\mxd\acm_working_mapbook_v4.mxd

APPENDIX 2

SUMMARY TABLE OF ANALYTICAL RESULTS

(One Page)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-214DS-AA-L01-050817	214 Depot Street - Location 1	AA	G1	11:05	16:36	331	10.58	10.17	10.38	3434.1	0.00078	0	<0.00013
DA-214DS-AA-L02-050817	214 Depot Street - Location 2	AA	G5	11:10	16:41	331	10.52	10.48	10.50	3475.5	0.00078	0	<0.00078
DA-214DS-AA-L03-050817	214 Depot Street - Location 3	AA	G4	11:32	16:45	313	10.50	10.44	10.47	3277.1	0.001	0	<0.00017
DA-214DS-AA-L01-050917	214 Depot Street - Location 1	AA	G1	12:33	17:02	269	11.07	10.19	10.63	2859.5	0.00094	0	<0.00047
DA-214DS-AA-L02-050917	214 Depot Street - Location 2	AA	G5	12:47	17:25	278	11.18	11.40	11.29	3138.6	0.00086	0	<0.00029
DA-214DS-AA-L03-050917	214 Depot Street - Location 3	AA	G6	12:55	17:33	278	11.46	11.52	11.49	3194.2	0.00084	1*	<0.0009
DA-214DS-AA-L04-050917	214 Depot Street - Location 4	AA	G4	12:42	17:44	302	11.29	11.19	11.24	3394.5	0.0012	0	<0.00024
DA-214DS-AA-L01-051017	214 Depot Street - Location 1	AA	G1	8:42	16:06	444	9.51	8.81	9.16	4067.0	0.0014	0	<0.0002
DA-214DS-AA-L02-051017	214 Depot Street - Location 2	AA	G6	8:50	16:25	455	9.42	9.22	9.32	4240.6	0.001	0	<0.00033
DA-214DS-AA-L03-051017	214 Depot Street - Location 3	AA	G5	8:46	16:10	444	9.63	9.00	9.32	4135.9	0.0012	0	<0.00011
DA-214DS-AA-L04-051017	214 Depot Street - Location 4	AA	G4	9:10	16:35	445	9.53	9.47	9.50	4227.5	0.0013	0	<0.00022
DA-214DS-AA-L01-051517	214 Depot Street - Location 1	AA	G5	9:05	16:41	456	9.34	8.97	9.16	4174.7	0.00065	0	<0.00065
DA-214DS-AA-L02-051517	214 Depot Street - Location 2	AA	G4	8:18	16:36	498	9.35	9.43	9.39	4676.2	0.00058	0	<0.00058
DA-214DS-AA-L03-051517	214 Depot Street - Location 3	AA	G2	8:05	16:18	493	9.10	8.89	9.00	4434.5	0.001	0	<0.00033
DA-214DS-AA-L04-051517	214 Depot Street - Location 4		G6	9:09	16:43	454	9.43	9.16	9.30	4219.9	0.00064	0	<0.00064

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-214DS-AA-L01-051617	214 Depot Street - Location 1	AA	G6	7:18	15:18	480	8.77	8.59	8.68	4166.4	0.0011	0	<0.00037
DA-214DS-AA-L02-051617	214 Depot Street - Location 2	AA	G5	7:34	15:34	480	8.89	8.82	8.86	4250.4	0.00092	0	<0.00092
DA-214DS-AA-L03-051617	214 Depot Street - Location 3	AA	G3	7:53	15:51	478	9.15	9.15	9.15	4373.7	0.00078	0	<0.000052
DA-214DS-AA-L04-051617	214 Depot Street - Location 4	AA	G4	7:28	15:22	474	8.92	8.76	8.84	4190.2	0.00064	0	<0.00032
DA-214DS-AA-L01-052217	214 Depot Street - Location 1	AA	G4	8:07	15:34	447	11.33	11.25	11.29	5046.6	0.00053	0	<0.00053
DA-214DS-AA-L02-052217	214 Depot Street - Location 2	AA	G1	8:19	15:47	448	11.45	11.59	11.52	5161.0	0.00052	0	<0.00052
DA-214DS-AA-L04-052217	214 Depot Street - Location 4	AA	G6	8:10	15:38	448	11.48	11.36	11.42	5116.2	0.00053	0	<0.00053
DA-214DS-AA-L05-052217	214 Depot Street - Location 5	AA	G5	8:04	15:31	447	11.26	11.20	11.23	5019.8	0.00054	0	<0.00054
DA-214DS-AA-L01-052417	214 Depot Street - Location 1	AA	G6	7:46	14:30	404	10.57	10.52	10.55	4260.2	0.00063	0	<0.00021
DA-214DS-AA-L04-052417	214 Depot Street - Location 4	AA	G5	7:49	14:28	399	10.64	10.50	10.57	4217.4	0.00064	0	<0.00064
DA-214DS-AA-L05-052417	214 Depot Street - Location 5	AA	G1	7:44	14:32	408	10.57	10.38	10.48	4273.8	0.00063	0	<0.00063

* Analytical results for sample DA-214DS-AA-L03-050917 detected 1 tremolite asbestos fiber. Analytical results were below the 0.001 f/cc action level.

Notes:

<: Less than
AA: Area air sampling
DA: Davidson Asbestos
DS: Depot Street
f/cc: Fibers per cubic centimeter
Id: Identification
l: Liters
lpm: Liters per minute
Min: Minutes
PCM: Phase contrast microscopy
PCME: Phase contrast microscopy equivalent
TEM: Transmission electron microscopy

APPENDIX 3

PHOTOGRAPHIC LOG

(Nine Pages)

OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northeast	**Date:**	May 30, 2017
Photographer:	Paul Prys, Tetra Tech, Inc. (Tetra Tech)	**Witness:**	None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the lawn located at 209 Watson Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.

OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	East	**Date:**	May 31, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER used an excavator and hand tools to remove ACM and asbestos-contaminated soil from under the tree lines and back stairwell located at 209 Watson Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.

OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	West	**Date:**	May 30, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: Perimeter air sampling was conducted by a Tetra Tech START, State of North Carolina-accredited air monitor to evaluate the effectiveness of engineering and safety controls in preventing the off-site migration of asbestos fibers during removal activities.

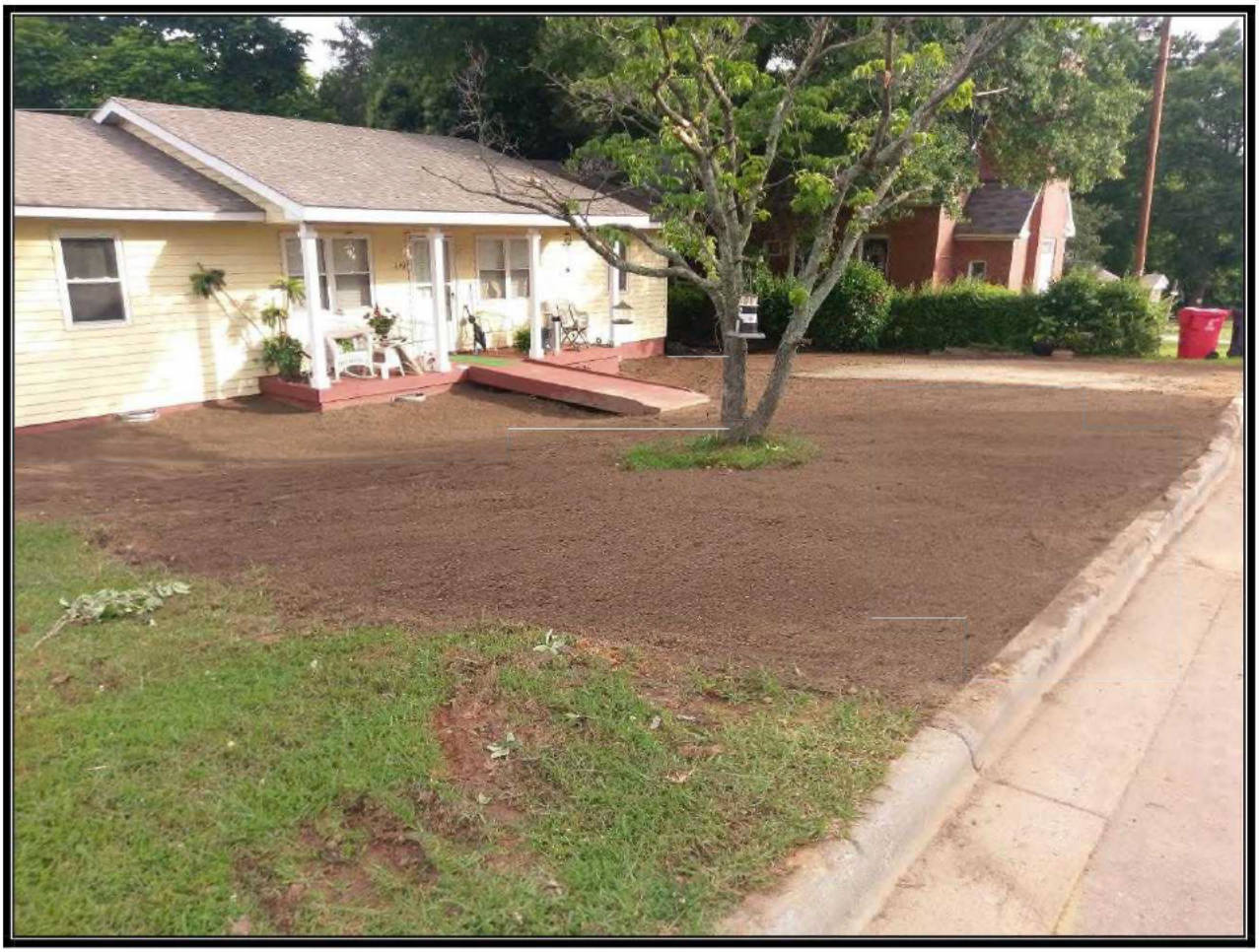
OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Southwest	**Date:**	May 30, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed snow fencing along the subsurface of the excavated area after the visual inspection conducted by the Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor detected no visible ACM in the excavated area.

OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northwest	**Date:**	May 30, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None
Subject:	ER used dump trucks, excavators, and skid steers to install backfill in the excavated areas.		



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northwest	**Date:**	May 31, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER used dump trucks, skid steers, and rakes to install topsoil in the excavated areas.

OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

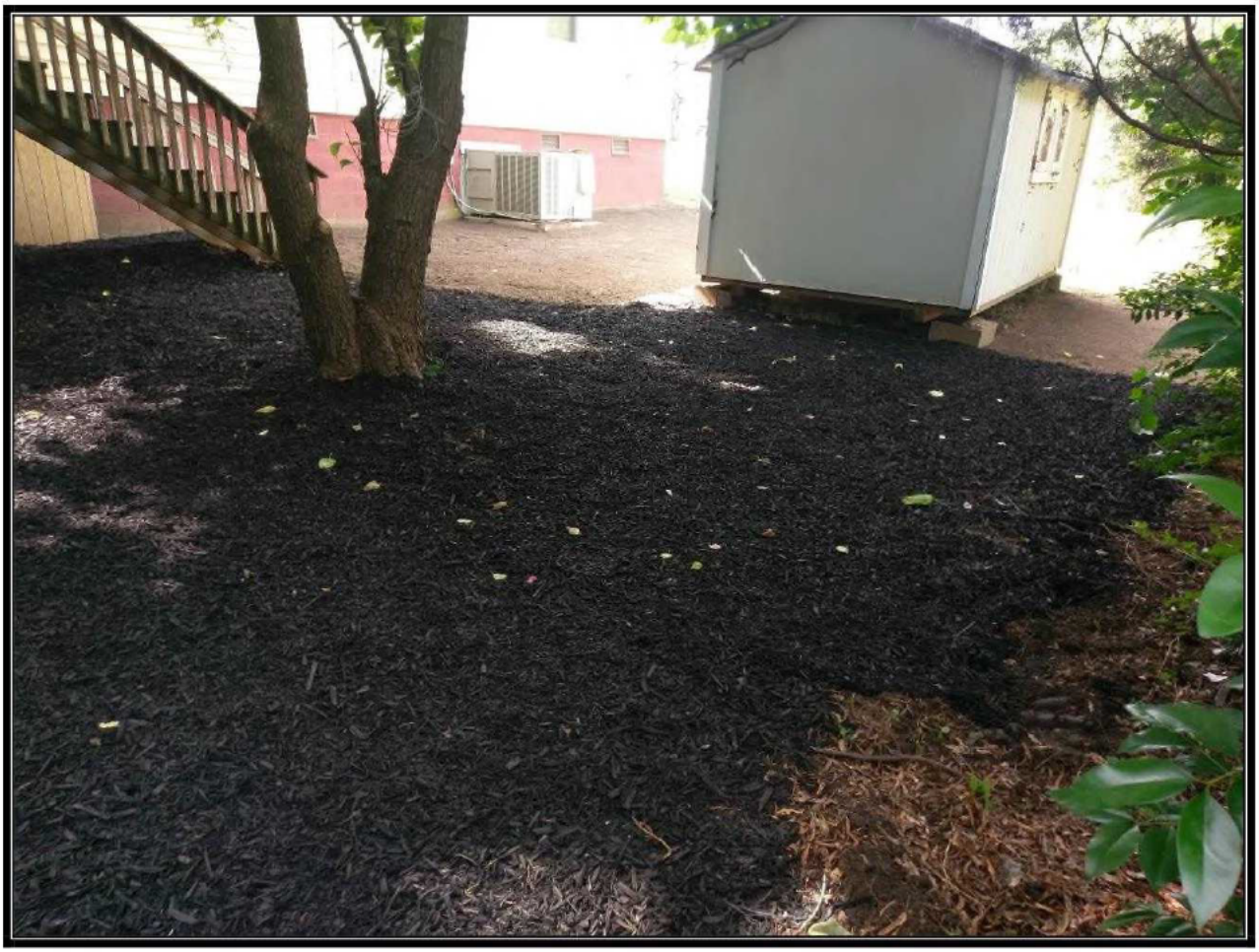
TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Southwest	**Date:**	June 5, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed sod in the excavated areas after backfill and topsoil were in place.

OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northwest	**Date:**	June 5, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed crushed rock in the driveway area after backfill was installed.



OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Southeast	**Date:**	June 1, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None
Subject:	ER installed mulch under the tree line areas and the stairwell that had been surface scraped after topsoil was installed.		